

*Claim Rejections Under 35 U.S.C. § 112*

Claims 2, 5, and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is traversed, and reconsideration and withdrawal thereof respectfully requested. The Examiner asserts there is no antecedent basis for "said composite oxide a" in claim 2. The Examiner further asserts that the piezoelectric film is indistinguishable from the oxide layer in claim 5. In addition, the Examiner avers that claim 6 contains unnecessary fragments.

Antecedent basis for "said composite oxide a" in line 9 of claim 2 is found in line 2 of claim 2. Therefore, there is proper antecedent basis for the limitations in claim 2, and claim 2 is definite.

As regards claim 5, claim 5 has been canceled, however, new claim 14 is substantially similar to claim 5. The composite oxide in the piezoelectric film, as required by claim 14, is distinct from the oxide,  $\text{ABO}_3$ , in the oxide layer. As recited in claim 1, the piezoelectric element comprises a piezoelectric film with an oxide layer arranged on the face of the piezoelectric film. The piezoelectric film and the oxide layer are two distinct components of the piezoelectric element. As recited in claim 14, the piezoelectric film comprises a composite oxide film. Thus, the composite oxide of the piezoelectric film is distinct from the oxide layer arranged on the face of the piezoelectric film.

As regards claim 6, claim 6 has been canceled, however new claim 15 is substantially similar to claim 6. New claim 15 does not contain the fragments that the Examiner alleged were indefinite.

Applicant submits that claims 2, 14, and 15 fully comport with the requirements of 35 U.S.C. § 112.

*Allowable Subject Matter*

Claims 1, 3, 4, and 7-9 are allowed. Claims 2 and 6 would be allowable if rewritten to overcome the indefiniteness rejections.

Applicant gratefully acknowledges the indication of allowable subject matter. In accordance with the Examiner's recommendation, claim 6 has been rewritten as claim 15 to overcome the indefiniteness rejection. In addition, claim 5 has been rewritten as claim 14 to overcome the indefiniteness rejection. Applicant submits new claims 14 and 15 are not narrower in scope than claims 5 and 6, respectfully, but rather the scope of the claims has been clarified. Applicant does not believe claim 2 needs to be amended as there is proper antecedent basis for all the claim limitations, as explained above.

In light of the Amendments and Remarks above, this application is in condition for allowance and the case should be passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in black ink, reading "Bernard P. Codd". The signature is written in a cursive style with a large initial 'B' and a stylized 'C'.

Bernard P. Codd  
Registration No. 46,429

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
(202) 756-8000  
**Date: October 11, 2002**  
Facsimile: (202) 756-8087

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION:**

The paragraph beginning at line 1 of page 5 has been rewritten as follows:

--An invention according to claim 5 provides the piezoelectric element according to any of claims 1 to 4, in which the piezoelectric film is formed of PZT expressed by a chemical formula,  $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$  ( $0.1 \leq x \leq 1$ ) or formed of a [material] material mainly composed of PZT.--

**IN THE CLAIMS:**

New claims 14 and 15 have been added.